

In the Claims

Applicant has submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Please cancel claims 79 and 85.

Please amend pending claims 1, 4 and 80 as indicated below:

1. (Currently Amended) An isolated nucleic acid molecule selected from the group consisting of:

(a) a nucleic acid molecule that hybridizes ~~under stringent conditions~~ to the complement of the nucleotide sequence of SEQ ID NO: 1 ~~and which codes for a MIVR-1 polypeptide having cardiac cell anti-apoptotic activity,~~

wherein the ~~stringent~~hybridization conditions are 1) hybridization at 65°C in hybridization buffer that consists of [()]3.5 x SSC, 0.02% Ficoll, 0.02% polyvinyl pyrrolidone, 0.02% Bovine Serum Albumin, 2.5mM NaH₂PO₄[()], pH7[()], 0.5% SDS, 2mM EDTA[()], wherein SSC is 0.15M sodium chloride/0.015M sodium citrate, pH7; SDS is sodium dodecyl sulphate; and EDTA is ethylenediaminetetracetic acid and 2) washing in 2 x SSC at room temperature and then in 0.1 x SSC/0.1 x SDS at 68°C,

(b) nucleic acid molecules that differ from the nucleic acid molecules of (a) in codon sequence due to the degeneracy of the genetic code, and

(c) complements of (a) or (b).

2. (Original) The isolate nucleic acid molecule of claim 1, wherein the isolated nucleic acid molecule comprises the nucleotide sequence set forth as SEQ ID NO: 1.

3. (Original) The isolated nucleic acid molecule of claim 1, wherein the isolated nucleic acid molecule consists of the nucleotide sequence set forth as SEQ ID NO: 3 or a fragment thereof.

4. (Currently Amended) An isolated nucleic acid molecule selected from the group consisting of

(a) ~~unique~~ fragments of a nucleotide sequence set forth as SEQ ID NO: 1, and
(b) complements of (a)[[.]]
~~provided that the unique fragment of (a) includes a sequence of contiguous nucleotides
which is not identical to any sequence selected from the sequence group consisting of
(1) sequences selected from the group consisting of SEQ ID NOs: 14-16, and 17,
(2) complements of (1), and
(3) fragments of (1) or (2).~~

5.-7. (Canceled)

8. (Previously Presented) An expression vector comprising the isolated nucleic acid molecule of claim 1, operably linked to a promoter.

9. (Original) An expression vector comprising the isolated nucleic acid molecule of claim 4 operably linked to a promoter.

10. (Original) A host cell transformed or transfected with the expression vector of claim 8.

11. (Original) A host cell transformed or transfected with the expression vector of claim 9.

12.-67. (Canceled)

68. (Previously Presented) A composition, comprising:
an agent comprising the isolated nucleic acid molecule of claim 1, and
a carrier.

69.-79. (Canceled)

80. (Currently Amended) The isolated nucleic acid molecule of claim 4, wherein the ~~unique~~ fragment has a size selected from the group consisting of at least: 8 nucleotides, 10 nucleotides, 12, nucleotides, 14 nucleotides, 16 nucleotides, 18 nucleotides, 20 nucleotides, 22 nucleotides, 24 nucleotides, 26 nucleotides, 28, nucleotides, 30 nucleotides, 50 nucleotides, 75 nucleotides, 100 nucleotides and 200 nucleotides.

81. (Previously Presented) The isolated nucleic acid molecule of claim 4, wherein the molecule encodes a polypeptide which is immunogenic.

82. (Previously Presented) An expression vector comprising the isolated nucleic acid molecule of claim 2 operably linked to a promoter.

83. (Previously Presented) An expression vector comprising the isolated nucleic acid molecule of claim 3 operably linked to a promoter.

84. (Previously Presented) An expression vector comprising the isolated nucleic acid molecule of claim 4 operably linked to a promoter.

85. (Canceled)

86. (Previously Presented) An expression vector comprising the isolated nucleic acid molecule of claim 80 operably linked to a promoter.

87. (Previously Presented) An expression vector comprising the isolated nucleic acid molecule of claim 81 operably linked to a promoter.

88. (Previously Presented) A composition, comprising:
an agent comprising the isolated nucleic acid molecule of claim 4, and
a carrier.